

**ABSTRACT**

This invention provides superactive analogs of FSH demonstrating enhanced bioactivity both *in vitro* and *in vivo* as compared to wild type FSH. In particular, the analogs of the invention demonstrate at least a ten fold increase in potency or at least a ten percent increase in maximal efficacy as compared to wild type protein. The analogs are particularly useful for treating subjects showing low FSH receptor expression or poor FSH receptor responsiveness, and for the treatment of any condition associated with glycoprotein hormone activity.